

MD 355 IS ASSUMED TO RUN
IN A NORTH-SOUTH DIRECTION

EX. SIGNS TO BE
RELOCATED (SHOWN
AT FINAL LOCATION)

PROPOSED SIGNS

PROPOSED VIDEO
DETECTION CAMERA

PROPOSED SIGNALS

NEMA PHASING

THE EXISTING INTERSECTION OPERATION WILL REMAIN THE SAME
FLASHING
OPERATION

NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

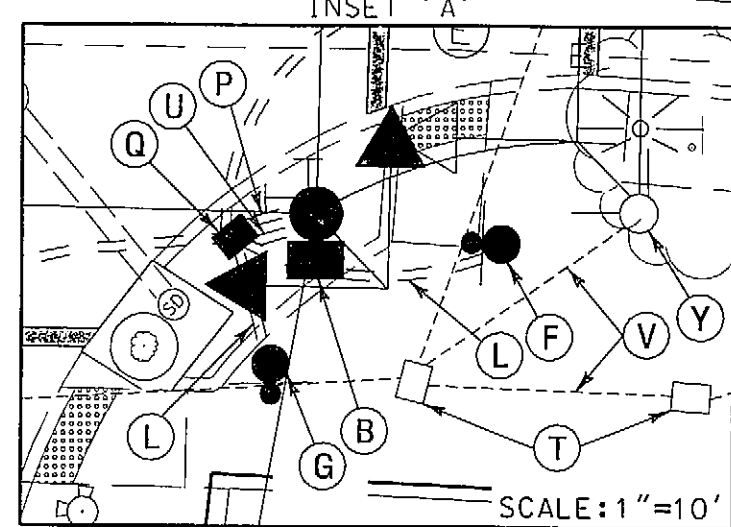
GENERAL NOTES

1. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 81B.03, MD 81B.01, MD 81B.02, MD 81B.04. THE CONTRACTOR SHALL VERIFY ALL GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
2. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE, THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
4. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
5. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
7. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
8. THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
9. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
10. THE 10" SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
11. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
12. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
13. FOR FINAL PAVEMENT MARKINGS REFER TO THE PAVEMENT MARKING PLANS, OTHER THAN THOSE DETAILED ON THE PLANS. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
14. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
15. REFER TO SHEET TSP- FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.
16. RELOCATION OF EXISTING SIGNS SHALL BE MEASURED AND PAID AS ITEM 813015-INSTALL OVERHEAD SIGN.
17. CALL MONTGOMERY COUNTY TRANSPORTATION MANAGEMENT CENTER (TMC) 72 HOURS PRIOR TO ANY DIGGING TO MARK THE EXISTING TRAFFIC SIGNAL EQUIPMENT.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING THE SIGNAL CABINET VIDEO INTERFACE EQUIPMENT TO THE MONTGOMERY COUNTY SIGNAL SHOP. CONTRACTOR SHALL DELIVER APS PUSHBUTTONS AND CENTRAL CONTROL UNIT TO MR. ROBERT RICKETTS AT MONTGOMERY COUNTY TECHNICAL CENTER AT 1283 SEVEN LOCKS ROAD, ROCKVILLE, MD 20854 AT LEAST 3 WEEKS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL HAVE THE APS MESSAGES PROGRAMMED FROM THE FACTORY AND DELIVER THE APS WAVE FILES TO MR. ROBERT RICKETTS.

CONSTRUCTION DETAILS

1. INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNALS, 15 FT. STREET LIGHTING ARM WITH A LED LUMINAIRE, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS MONTGOMERY LANE"). (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
2. INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A TWIN 50 FT./60 FT. (CUT TO 53 FT.) MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNALS, MONTGOMERY COUNTY SPICE CABINET AND 15 FT. STREET LIGHTING ARM WITH A LED LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
3. INSTALL CONCRETE FOUNDATION WITH 14 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE. STANDARD NO. MD 801.01-01 AND TRAFFIC SIGNAL HEAD. (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
4. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE. STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, SIGNALS, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WISCONSIN AVE"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
5. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE. STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, SIGNALS, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WISCONSIN AVE"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
6. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE. STANDARD NO. MD 801.01-01, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WISCONSIN AVE"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
7. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE. STANDARD NO. MD 801.01-01, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS MONTGOMERY LANE"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
8. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE. STANDARD NO. MD 801.01-01, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS MONTGOMERY LANE"). (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
9. INSTALL NEMA SIZE "S" BASE MOUNTED CABINET AND CONTROLLER WITH SIZE "S" FOUNDATION STANDARD NO. MD 816.07. (INSTALL 2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE). EXISTING BRICK PAVEMENT SIDEWALK TO BE USED IN LIEU OF CONCRETE PADS.
10. USE EXISTING EMBEDDED METELED SERVICE PEDESTAL.
11. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
12. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
13. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
14. REMOVE EXISTING CONCRETE SIDEWALK AND BRICK PAVERS AND INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CONDUIT SHALL BE INTO EXISTING 2 IN. ELBOW IN SERVICE PEDESTAL FOUNDATION CURRENTLY BEING UTILIZED FOR EXISTING ELECTRICAL FEED. THIS WORK SHALL BE DURING OFF-PEAK HOURS. (SEE SPECIAL NOTE 5).
15. REMOVE EXISTING CONCRETE SIDEWALK AND BRICK PAVERS AND INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED. REPLACE 5 IN. CONCRETE SIDEWALK AND RESET BRICK PAVERS.
16. CAP AND ABANDON EXISTING CONDUIT.

RIGHT OF WAY LINE



SCALE: 1"=10'

1. INSTALL 12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR CROSSWALKS.
2. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
3. REMOVE EXISTING STEEL POLE AND ALL ASSOCIATED EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. EXISTING 01-3 WHITE ON BLUE STREET NAME SIGNS (#22, #27, #33 & #36) TO BE RELOCATED TO PROPOSED MAST ARM AND SIGNAL POLE AS SHOWN.
4. REMOVE EXISTING STEEL POLE AND ALL ASSOCIATED EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. EXISTING 01-3 WHITE ON BLUE STREET NAME SIGNS (#18, #29 & #32) TO BE RELOCATED TO PROPOSED MAST ARM AND SIGNAL POLE AS SHOWN.
5. CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
6. INSTALL M2-1 (21"x15") AND M1-5 (30"x24") SIGNS ON ONE 4 IN. X 4 IN. TREATED WOOD SUPPORT. (L=16 FT.)
7. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE AND MONTGOMERY COUNTY SPICE CABINET MOUNTED ON TOP OF PEDESTAL POLE. (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
8. USE EXISTING HANDHOLE. REBUILD WITH NEW FRAME AND COVER. DISCONNECT AND PULL BACK EXISTING INTERCONNECT CABLE HEADING EAST FROM EAST LANE AND RE-PEED IN NEW CONDUIT TO PROPOSED POLE MOUNTED SPICE CABINET. (SEE WIRING DIAGRAM FOR DETAILS).
9. REMOVE EXISTING CONCRETE SIDEWALK AND PAVERS AND INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. REPLACE 5 IN. CONCRETE SIDEWALK AND RESET BRICK PAVERS.

SPECIAL NOTES:

1. ALL EXISTING HANDHOLES, CONDUIT AND INTERCONNECT CABLE TO BE REMOVED OR ABANDONED SHALL REMAIN IN PLACE UNTIL TURN ON OF PROPOSED SIGNAL. CONTRACTOR SHALL COORDINATE WITH MONTGOMERY COUNTY FORCES.
2. THE CONTRACTOR SHOULD TERMINATE ALL CABLES EXCLUDING INTERCONNECT CABLE. ALL DISCONNECTING AND SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES.
3. THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF MAST ARM. IF NEW MAST ARM CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS OR SPAN WIRES, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
4. CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
5. THE CONTRACTOR SHALL COORDINATE WITH SHA TRAFFIC OPERATION DIVISION TO CONTACT LOCAL POWER COMPANY TO SET-UP WORK WITH TO DISCONNECT THE EXISTING ELECTRICAL SERVICE AND HAVE THE NEW SERVICE ENERGIZED.
6. ALL SIGNAL STRUCTURES AND PEDESTRIAN PEDESTAL POLES SHALL BE PAINTED USING FEDERAL BROWN NUMBER 5950-20040.

WR&A

WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21201

APPROVALS	
TEAM LEADER	
ASST. DIV. CHIEF	
DIVISION CHIEF	
OFFICE DIRECTOR	

REVISIONS	
1	REBUILD TRAFFIC SIGNAL AND ADD APS. SHA NO. M01775177 TMSR L488 03/05/2013

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 355 (Wisconsin Ave) and Montgomery Lane/Montgomery Ave MD410
Bethesda, Maryland

TRAFFIC SIGNALIZATION PLAN			
SCALE 1" = 20' ADVERTISED DATE 10/22/1994 CONTRACT NO.			
DESIGNED BY	A.S.R.	COUNTY	Montgomery
DRAWN BY	T.E.L.	LOGMILE	15035501.62
CHECKED BY	B.C.M.	TIMS NO.	
F.A.P. NO.	SEE TITLE SHEET	TOD NO.	
TS NO. 10435B	DRAWING TSP-13	OF 20	SHEET NO. OF ###

PLOTTED: March 11, 2013
FILE: N:\31689-225\CADD\PSG-M013-M033.dgn